Improving Transition Behavior in Students with Disabilities Using a Multimedia Personal Development Program: Check and Connect

By Sue E. Hoppe

omputer-assisted instruction is frequently shown to be superior to traditional instruction, in terms of both increased academic achievement and improved student attitudes toward school work (Cardona, Martinez, & Hinojosa, 2000; Lee, McGee, &

Ungar, 2001; Lewis, 2001; Laffey, Espinosa, Moore, & Lodree, 2003). Instruction on a computer provides immediate feedback to students and incorporates branching. Branching programs direct students who respond incorrectly to other frames permitting further practice in specific lessons before continuing with new information. The major advantage of a branching program is that it provides remedial instruc-

tional frames only for students who have difficulty with a particular concept. Students not needing help can proceed to new information without having to spend time on practice not needed. The computer automatically presents the appropriate frame for any response the student has given. Because of the graphics capabilities of computers (e.g., complex moving visual displays), computer-assisted instruction presents information in a way traditional instruction cannot.

Behavior influences success in school, and success depends on students learning strategies to improve social performance and to control emotions (Neubert, 2003). Programs that teach coping strategies and academic, social and life skills have been shown to substantially improve behavior (Macarthur & Ferretti, 2001). Behavior exhibited in school situations is the most reliable indicator in predicting performance in full-time employment, functional living and social success (Ward, Mallett, Heslop, & Simons, 2003). According to Laffey, Espinoza, Moore

and Lodree (2003), students with learning problems due to specific learning disabilities, mild mental retardation, other health impairments and emotional disturbances are a group at risk in school. The study found that students with learning problems experienced higher stress, lower

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peer social support and poorer adjustment than do other students without disabilities. Students with learning problems often have difficulty getting along with their teachers and controlling their behavior. Effective interventions help students with learning problems focus on developing skills to cope with not only academic demands, but peer stress, relationships with teachers and other authority figures,

strengthening interpersonal skills, and enhancing positive self-esteem (Laffey et al., 2003).

The program evaluated in this article, Check and Connect (Hoppe & Bray, 2000), was a computer-assisted learning program funded by a competitive subgrant under the Individuals with Disabilities Education Act Part B (ages 3-21) in the amount of \$25,000. A rural high school in southeastern Oklahoma used the funds to purchase six IBM multimedia computers with CD-ROM and video capabilities and several learning software programs. The Skillsbank basic skill program for reading, language arts, mathematics, writing, study skills and high order thinking skills provided software to improve academic skills. Various personal development software programs dealing with dropout prevention, improvement of self-esteem, personal development, healthy lifestyles, career paths, human health and study skills were purchased to improve areas of the affective domain. The personal development software

provided simulations on a computer for behavior expectations in school, work and in the community. The rationale for this type of software was that computerized role-playing situations provide practice for increasing the participants' ability to make positive decisions and controlling conflicts. Part of the grant money (\$10,000) was used for salaries for 20 students to work as peer assistants in a greenhouse on the school grounds. The program was implemented through an existing work study program which had been in progress for three years using a school-based and work-based curriculum. The high school wanted to expand the program to integrate a productive work-study program with a personal development program for students who exhibited behavior difficulties in high school.

Many students with disabilities come to high school with a history of academic and social problems which may be compounded as students begin to make the transition from school to community. Parent surveys, early transition surveys and personal conversations between parents, school and rehabilitation counselors suggested a need for this school system to address behavioral intervention strategies that helped students with disabilities achieve in school. The students targeted in this program exhibited many behaviors associated with risk for school failure, such as poor motivation, poor attendance, poor emotional control, poor self-esteem, impulsive behavior, non-compliant behavior to authority figures, poor self-management skills, low academic skills and poor pragmatic language skills. The Check and Connect personal development program focused on connecting parents and other school personnel to the targeted population. The major goal of the program was to create behavioral interventions that enabled students to acquire social and behavioral skills which generalized to the home, employment and community setting.

Evaluation method

Four constructs were explored to assess the efficacy of the Check and Connect personal development program: (a) work-related, (b) interpersonal, (c) social/community and (d) overall rank. The indicators used to measure participation in school were based on the Hawthorne Transition Behavior Scale. These indicators were used to measure an overall rank score in transition behavior. The rating scales were completed by the student's special education teacher and by a general education teacher. The four constructs were measured using a pre- and post-evaluation design. The data were analyzed and graphed to determine program effectiveness. The mean scores of pre- and post-ratings for individual student improvement in academic and behavioral performance are presented in Figure 1. Anecdotal information was obtained from teachers, administrators and students involved in the program through personal interviews.

Procedures of Check and Connect

Check and Connect implemented approaches for functional behavioral assessment, behavior intervention plans and positive behavior support strategies and techniques using multimedia personal development software (one to two class periods three days a week) in combination with work study in a greenhouse project (one to two class periods, two days a week) with pay. Students used a multimedia personal development program to experience activities, to self-pace and to self-study for self-improvement. A Check and Connect team approach was used involving special education teachers as monitors, counselors, administrators and parents. The program built on an existing work-study program by establishing networks and connections with community and school.

The first goal of the program was to assess and plan behavioral interventions to increase academic and behavioral performance in students with challenging behavior. In order to accomplish the goal, strategies for tracking alterable behaviors connected with school failure was developed. Staffing patterns for school personnel to assess and plan behavioral interventions was established. The second goal was to increase student motivation, self-esteem, responsibility, decision making and ability to resolve conflicts appropriately. Students used a multimedia personal development program three hours weekly along with an academic skills program leveled for them to improve deficit areas by one grade level, one to two hours daily. Students practiced interpersonal skills through application as peer assistants in a greenhouse (with pay) and progressed to community worksites.

The program targeted 20 students in high school with disabilities categorized as "learning disabilities," "other health impairment," "emotional disturbance" and "mental retardation." The program encompassed assessment (Check) and intervention (Connect). Cultural groups included Caucasian, Native American and African American. The students scored very low in adaptive behavior ratings, and many of these students had previous school and communityrelated behavior problems. The peer-tutoring phase of the program provided opportunities to practice newly learned interpersonal skills in a responsible manner and with adequate supervision. Behavioral issues were addressed much like the core curriculum. Check and Connect sought to address the function of the behavior rather than seeking to only control the symptom of the problem. The discretionary funds were used to pay students to work as peer assistants two hours weekly and to purchase supplies, software and computers to use as the basis of a functional behavior-based and instructional-based curriculum through multimedia personal development three hours weekly.

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The Check and Connect personal development program contained two major components, assessment and intervention. The Check component used a monitor (special education teacher) to regularly check and assess students' engagement with school and promptly facilitate efforts to build and maintain connections that helped students regulate appropriate behavior. The monitor also coordinated with school counselors, administration and parents through meetings to establish behavioral intervention plans for students experiencing problems in school.

The Connect component contained two levels of intervention: basic and intensive. Basic interventions were administered to all targeted students at least monthly. The interventions focused on empowering students with academic skills to promote their own school completion. Intensive strategies drew upon broad areas of support and involved problem-solving and conflict-management skills using various multimedia software programs three hours a week, parent problem-solving meetings held as necessary, individualized behavioral contracts and negotiating alternatives to out-of school suspension with school staff and students. Academic support to increase basic skills using multimedia programs, meetings with teachers and school staff regarding student progress and areas of concern and initiating changes in students' class schedules were also used. Community exploration in which students worked as peer assistants (with pay) in a greenhouse program for students with moderate/severe disabilities gave students practice in using learned skills. As responsibility, trust and behavior improved, students were placed in community sites for on-the-job training in areas of their interest. Specific interventions were determined by the monitor's judgment, preferences of the youth and family and strengths and immediate resources of the school program.

Results

The mean quotient scores (based on the *Hawthorne Transition Behavior Scale*) of the students indicated an increase between pre- and post-ratings in all four areas (see Figure 1). The greatest mean increase was in the area of interpersonal skills. This area had a mean increase of 52. Work-related scores had a mean increase of 33. Social/community had a mean increase of 20. The overall rank quotient scores had a mean increase of 36.

The Check and Connect program appeared to be beneficial for the students targeted in the program. The students reported that the use of the computers and the pay incentive gave them reasons to stay in school. It was also observed by teacher and administrators that the students worked hard at achieving learning goals. The program included four main components that suggest reasons for the increase in students'

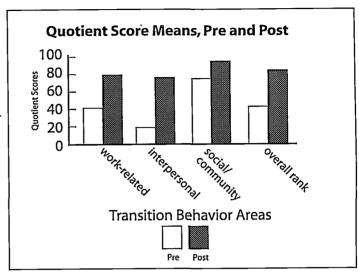


Figure 1. Quotient score means, pre and post, transition behavior scale.

performances. Check and Connect provided opportunities for success in school by using a motivating curriculum on a computer to increase basic academic skills. In the affective domain, the program created a caring and supportive environment for students experiencing interpersonal problems, which encouraged the communication of the relevance of education to future endeavors. The greatest asset the program gave to students and teachers appears to be the behavior support strategies and instruction in behavior management implemented as a team approach. Behavior support strategies and instruction in behavior management enabled these students to stay in school, improve interpersonal skills and increase academic skills. The Check and Connect program addressed total student needs: academic, social, emotional and physical.

Check and Connect had a unique feature incorporated into it that was extremely motivating for this population of students: multimedia computers. Interactive software that focused on improving behavior and academic skills allowed students to work on conflict areas individually and at their own pace. Working as peer assistants with pay in a greenhouse project allowed the students to build interpersonal skills and greater self-esteem. Check and Connect added technology-based services to existing programs in the school system. The program enabled the school district to build on an existing work study program, build networks with community organizations and connections with individual professionals in the school district and the community at large. Check and Connect promoted a technological and vocational technique to address behavior, cognitive and affective domains of learning as well as promoted the development of positive behavioral interventions and support. The program enabled students to self-pace and self-study for self-improvement using technology in an effective manner.

Dr. Sue Hoppe has been working in the Department of Curriculum and Instruction at Jacksonville State University since August, 2003. Her area of interest is special education. Prior to working in higher education, she taught special education for 20 years in the areas of multiple disabilities, mental retardation, specific learning disabilities and other health impairments. Check and Connect is one of her five funded IDEA discretionary grants. Dr. Hoppe believes that technology is a great resource in the instruction of students with disabilities.

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